

What is claimed is:

1. A method of sending a message sent over a network by way of a backbone carrier, comprising:
 - establishing a first tunnel between a backbone and a first client;
 - establishing a second tunnel between the backbone and a second client;
 - receiving, by the backbone, a packet through the first tunnel, from the first client;
 - routing the packet through the backbone; and
 - sending, by the backbone, the packet through the first tunnel, to the second client.
2. The method of claim 1, wherein the first tunnel is an IP in IP tunnel.
3. The method of claim 1, wherein the first tunnel is a GRE tunnel.
4. The method of claim 1, wherein establishing a first tunnel includes establishing a first tunnel between a router of a backbone and a router of the first client.
5. The method of claim 1, wherein establishing a second tunnel includes establishing a second tunnel between a router of a backbone and a router of the second client.
6. The method of claim 1, further including informing all clients when a new tunnel is created.
7. The method of claim 1, further comprising sending a packet via a best-effort transport mechanism when a tunnel or the backbone is not available.
8. The method of claim 1, further comprising sending updates to the routing table of the first client's router causing packets to be sent to clients to be sent through the tunnel.
9. The method of claim 1, further comprising adding, by the first client's router, a new header to packets to be sent to clients, indicating that the packet's destination is a router in the backbone.

10. The method of claim 1, wherein routing the packet through the backbone includes:
determining that the packet was received via a tunnel;
stripping a tunnel-packet header from the packet; and
routing the packet according to the destination address in the original packet after
the tunnel-packet header is removed.

11. The method of claim 1, wherein routing the packet through the backbone includes:
determining the original destination address of the packet; and
routing the packet in accordance with its original destination address.

12. The method of claim 1, wherein creation of the first and second tunnels causes
packets to be routed on a symmetric path.

13. The method of claim 1, wherein sending the packet to the second client through the
second tunnel includes:
adding a new header to the packet that indicates that the packet is to be sent via
the second tunnel; and
sending the packet to the second client through the second tunnel.

14. The method of claim 1, wherein each edge router operates in accordance with a
centralized routing policy for its hosted client sessions.

15. A method of establishing Internet routing tables , comprising:
establishing a first tunnel between a backbone and a first client; and
establishing a second tunnel between the backbone and a second client,
wherein the first and second tunnels and the backbone form a symmetric path for
forward and return traffic between the first and second client on the Internet.

16. A system that sends a message over a network by way of a backbone carrier,
comprising:

means for establishing a first tunnel between a backbone and a first client;
means for establishing a second tunnel between the backbone and a second client;
means for receiving, by the backbone, a packet through the first tunnel, from the first client;
means for routing the packet through the backbone; and
means for sending, by the backbone, the packet through the first tunnel, to the second client.

17. A system that sends a message over a network by way of a backbone carrier, comprising:

a portion configured to establish a first tunnel between a backbone and a first client;
a portion configured to establish a second tunnel between the backbone and a second client;
a portion configured to receive, by the backbone, a packet through the first tunnel, from the first client;
a portion configured to route the packet through the backbone; and
a portion configured to send, by the backbone, the packet through the first tunnel, to the second client.

18. The system of claim 17, wherein the first tunnel is an IP in IP tunnel.

19. The system of claim 17, wherein the first tunnel is a GRE tunnel.

20. The system of claim 17, wherein the portion configured to establish a first tunnel includes a portion configured to establish a first tunnel between a router of a backbone and a router of the first client.

21. The system of claim 17, wherein the portion configured to establish a second tunnel includes a portion configured to establish a second tunnel between a router of a backbone and a router of the second client.

22. The system of claim 17, further including a portion configured to inform all clients when a new tunnel is created.

23. The system of claim 17, further comprising a portion configured to send a packet via a best-effort transport mechanism when a tunnel or the backbone is not available.

24. The system of claim 17, further comprising sending updates to the routing table of the first client's router causing packets to be sent to clients to be sent through the tunnel.

25. The system of claim 17, further comprising a portion configured to add, by the first client's router, a new header to packets to be sent to clients, indicating that the packet's destination is a router in the backbone.

26. The system of claim 17, wherein routing the packet through the backbone includes:
a portion configured to determine that the packet was received via a tunnel;
a portion configured to strip a tunnel-packet header from the packet; and
a portion configured to route the packet according to the destination address in the original packet after the tunnel-packet header is removed.

27. The system of claim 17, wherein the portion configured to route the packet through the backbone includes:

a portion configured to determine the original destination address of the packet;

and

a portion configured to route the packet in accordance with its original destination address.

28. The system of claim 17, wherein creation of the first and second tunnels causes packets to be routed on a symmetric path.

29. The system of claim 17, wherein the portion configured to send the packet to the second client through the second tunnel includes:

a portion configured to add a new header to the packet that indicates that the packet is to be sent via the second tunnel; and

a portion configured to send the packet to the second client through the second tunnel.

30. The system of claim 17, wherein each edge router operates in accordance with a centralized routing policy for its hosted client sessions.

31. A system of establishing Internet routing tables, comprising:

means for establishing a first tunnel between a backbone and a first client; and

means for establishing a second tunnel between the backbone and a second client,

wherein the first and second tunnels and the backbone form a symmetric path for forward and return traffic between the first and second client on the Internet.

32. A system of establishing Internet routing tables , comprising:

a portion configured to establish a first tunnel between a backbone and a first client; and

a portion configured to establish a second tunnel between the backbone and a second client,

wherein the first and second tunnels and the backbone form a symmetric path for forward and return traffic between the first and second client on the Internet.

33. A computer program product, including program instructions on a computer-readable medium, the instructions comprising instructions allowing a computer to perform:

establishing a first tunnel between a backbone and a first client;

establishing a second tunnel between the backbone and a second client;

receiving, by the backbone, a packet through the first tunnel, from the first client;

routing the packet through the backbone; and

sending, by the backbone, the packet through the first tunnel, to the second client.

34. A computer program product, including program instructions on a computer-readable medium, the instructions comprising instructions allowing a computer to perform:

establishing a first tunnel between a backbone and a first client; and

establishing a second tunnel between the backbone and a second client,

wherein the first and second tunnels and the backbone form a symmetric path for forward and return traffic between the first and second client on the Internet.